

**Eucera** of the tallgrass prairie region and greater midwest

**M. Arduser**

*edited October 21, 2019*

[**Note:** a revised classification of a large component of eucerine bees (Dorchin et. al. 2018) re-defined and expanded the genus *Eucera* to include, as subgenera, many eucerine groups previously recognized as genera; according to that classification, the species in the key below would all be included in the subgenus *Synhalonia*. ]

**Males**

1. S6 lateral margin with a small lobe-like process that projects outward from the lateral margin at a right angle.....2  
S6 lateral margin without any process projecting outward from the lateral margin at a right angle, but lateral margin may be curved, sinuate, or have a broadly rounded “shoulder”.....3
2. Mid- and hind tibial spurs strongly hooked (hamate) at very tip...*hamata* (Bradley)  
Mid and hind tibial spurs straight or slightly curved, not hamate; a Great Plains and western US species of unlikely occurrence in our area.....*speciosa* (Cresson)
3. Labrum notched, emarginate, or incised apico-medially, sometimes weakly so.....4  
Labrum with apical margin entire, without notch or emargination.....5
4. Labrum all or nearly all yellow (pale yellow or whitish yellow); mandible usually with a pale yellow spot or macula at base, sometimes quite small; fasciae of T2-T6 variable, may be all light, all dark, or a mixture of light and dark  
.....*dubitata* (Cresson), *in part*  
Labrum all or largely dark (occasionally with a medial yellow maculation); mandible dark at base, without yellow spot or macula; fasciae of T2-T6 all light  
.....*belfragii* (Cresson)
5. Oculo-clypeal space wide, about as wide as the diameter of a lateral ocellus; T2-T5 lacking fasciae, all hairs on T2-T5 erect or suberect, and dark; 1<sup>st</sup> recurrent vein meeting 2<sup>nd</sup> submarginal cell about 2/3 the way from crossvein separating 2<sup>nd</sup> and 3<sup>rd</sup> submarginal cells.....6  
Oculo-clypeal space narrow, no more than 1/2 the diameter of a lateral ocellus; T2-T5 with apical or subapical fasciae (appressed hairs), fasciae often pale; 1<sup>st</sup> recurrent vein meeting 2<sup>nd</sup> submarginal cell closer to the crossvein separating 2<sup>nd</sup> and 3<sup>rd</sup> submarginal cells.....7
6. F1 length (on its longest side) about 1/2 the length of F2.....*illinoensis* (Robt.)  
F1 shorter, at most only 1/3 length of F2.....*atriventris* (Sm.)
7. T2-T4 pubescence all or nearly all orangeish-yellow, without any dark hairs;  
mandible at base without yellow maculae.....*fulvohirta* (Cr.)

T2-T4 pubescence a mixture of dark and light hairs, never orangeish-yellow; mandible usually with basal yellow maculae, maculae often small or very small.....8

**8.** Clypeus entirely bright yellow, without a narrow dark posterior margin; F1 short, on its longest side only 1/4 (or less) the length of F2; T3-T5 often with very weak, often incomplete pale apical fasciae; gonostylus without hairs except at very base

.....*rosae* (Robt.)

Clypeus pale yellow, usually with a narrow dark posterior margin; F1 short, on its longest side 1/3 the length of F2; T3-T5 usually with complete apical fasciae (light or dark or some combination of light and dark); gonostylus hairy throughout its length except at apex.....*dubitata* (Cresson), *in part*

**Eucera** of the tallgrass prairie region and greater midwest

**M. Arduser**

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**Females** (*Note: the female of illinoensis is unknown*)

1. Scopal hairs on hind tibia dark brown to black.....2  
[includes *atriventris* and *rosae*]  
Scopal hairs on hind tibia pale (whitish, yellowish or orangeish).....3
2. T1 punctures obscure, weak, very close; T2 apical area very narrow; galea longer than length of head (about 1/3 longer than eye length), mostly shiny, becoming weakly tessellate on apical 1/3 or so; upper Midwest and central and northern TGP  
.....*atriventris* (Sm.)  
T1 punctures strong, distinct, separated; T2 apical area much broader than that of *atriventris*; galea only slightly longer than head length, if at all, and tessellate on apical 1/2 or more, shiny at base; throughout EUS and TGP region.....*rosae* (Robt.)
3. Nearly all hairs on terga, and much of tergal integument, orange to orangeish-yellow, white or dark hair bands absent; galea strongly tessellate throughout and slightly shorter than length of head; SE US north to Missouri bootheel.....*fulvohirta* (Cr.)  
Tergal hairs (at least T1-T4) some combination of light and dark or largely dark, never orange or yellowish-orange; integument always dark (brownish to blackish).....4
4. Mid and hind tibial spurs abruptly hooked at tips; galea tessellate, galea length about 1/4 longer than length of head; usually a weak line down center of clypeus; throughout most of EUS and northern 1/2 of TGP region.....*hamata* (Bradley)  
Mid and hind tibial spurs with tips straight or slightly curved, not bent or hooked; galea variable, often shiny.....5
5. Posterior face of propodeum laterally bordered by thin carinae, carinae nearly reaching propodeal triangle; tergites with broad white fasciae; Great Plains, of possible occurrence needing documentation in TGP region and midwest.....*speciosa* (Cresson)  
Posterior face of propodeum laterally without carinae, more-or-less rounded laterally; tergites with or without broad white fasciae.....6
6. Tergites beyond T1 with all or mostly dark hairs, lacking pale (whitish) hair bands; scopal hairs pale yellowish to fulvous.....*dubitata* (Cr.) (dark form)  
T2-T4 with complete, dense, white more-or-less apical hair bands (when stained with moisture or regurgitant these can appear dark); scopal hairs usually more whitish...7

7(6). T5 apical band medially dark brown/blackish.....*belfragii* Cresson  
T5 apical band all pale brown to largely whitish.....*dubitata* (Cr.) (light form)